

REMARKS

The Applicants hereby submit this Amendment and Request For Reconsideration in response to the Office Action mailed on 6 June 2006 for the subject application.

The present application was filed with claims 1-54. In the present amendment, the Applicants amend claims 1, 6, 8, 9, 13, 14, 18, 19, 21, 22, 25, 26, 29, 32, 39, 43, 46, 47, 49, 51, 52, and 53; no claims have been added or canceled. Therefore, claims 1-54 as amended are currently pending in the present application. By this amendment, the Applicants respectfully submit that no new matter has been entered. The added limitations are fully supported in the present application as originally filed.

In the Office Action of 6 June 2006, the Examiner rejected claims 1-20 of the present application under 35 U.S.C. §§ 102 and 103 based on Lehtovirta et al. (U.S. Patent Application Publication No. 201/0034228) and Martin et al. (U.S. Patent No. 6,275,680). In response, the Applicants respectfully submit that claims 1-20 as amended are allowable over the prior art for at least the following reasons.

In order for claims to be properly rejected under 35 U.S.C. §§ 102 and 103, the prior art alone or in combination must teach or suggest each and every limitation of the claims. Furthermore, there must be some adequate suggestion or motivation to combine the teachings of the prior art for rejection under 35 U.S.C. § 103.

In the present case, the prior art of record – alone and in combination – fails to teach or suggest every limitation of the claims as amended. In particular, the prior art in combination fails to teach or suggest (e.g. as illustrated in claim 8) the broadcasting of identifiers in a list of wireless devices identified to have experienced communication losses in the wireless network, which are decoded by wireless devices after recovery from such communication losses. The prior art further fails to teach or suggest the transmission of a control message which informs the wireless network of the presence and recovery of the wireless device from the communication loss upon identifying a

matched identifier. The wireless device of the present disclosure may refrain from transmitting such control message if none of the broadcasted identifiers match the identifier of the wireless device. Advantageously, techniques of the present invention efficiently facilitate communications between the wireless devices and wireless network, despite out-of-coverage conditions, without overburdening the network with unnecessary traffic.

Lehtovirta et al. do not teach or suggest the limitations of claims 1-20 as amended. Lehtovirta et al. teach the communication of identifiers for the release of resources associated with the connections. As apparent, the identifiers in Lehtovirta et al. are not identifiers of wireless devices identified to have experienced communication losses in the wireless network, which are decoded by a wireless device after recovery from such a communication loss. Martin et al. also do not teach or suggest the limitations of claims 1-20 as amended. Martin et al. teach the matching of identifiers at a wireless device so that a call may be established. As apparent, the identifiers in Martin et al. are not identifiers that are decoded by a wireless device after recovery from a communication loss, which may cause the wireless device to transmit a control message upon identifying a matching identifier to inform the wireless network of the presence and recovery of the wireless device from the communication loss. Neither reference even teaches or suggests any wireless device recovery from a communication loss. Thus, Lehtovirta et al. and Martin et al. together fail to teach or suggest each and every limitation in claims 1-20 as amended.

Furthermore, there is lack of an adequate suggestion or motivation to combine the teachings of the prior art for proper rejection under 35 U.S.C. § 103. These considerations must take into account any teachings that teach away from the suggested modifications of the primary reference. In the present case, the primary purpose of Lehtovirta et al. relates to the communication of identifiers *for the release of resources of existing failed connections*. On the other hand, the focus of Martin et al. relates to the matching of identifiers *for the establishment of a new communication link for a new call*. Thus, the identifiers described in these two references are utilized for two altogether

different purposes, such that no suggestion or motivation exists to associate the two. An attempt to release resources an existing failed connection may be viewed as the opposite of an attempt to establish a new communication link for a new call. These are different and unrelated teachings. As apparent, there is no adequate suggestion or motivation to combine these teachings of Lehtovirta et al. and Martin et al. to produce the techniques of the present invention.

Since Lehtovirta et al. and Martin et al. in combination fails to teach or suggest each and every limitation in claims 1-20 as amended, the rejections under 35 U.S.C. §§ 102 and 103 are overcome. Further, since there is no adequate suggestion or motivation to combine the teachings of these references, the additional rejections under 35 U.S.C. § 103 are overcome for even additional reasons. Since the rejections have been overcome and claims 1-20 as amended are inventive over the prior art, the Applicants respectfully request for the allowance of claims 1-20 as amended.

In the same Office Action of 6 June 2006, the Examiner rejected claims 21-31 of the present application under 35 U.S.C. §§ 102 and 103 based on Lehtovirta et al. (U.S. Patent Application Publication No. 201/0034228) and Martin et al. (U.S. Patent No. 6,275,680). In response, the Applicants respectfully submit that claims 21-31 as amended are allowable over the prior art for at least the following reasons.

In order for claims to be properly rejected under 35 U.S.C. §§ 102 and 103, the prior art alone or in combination must teach or suggest each and every limitation of the claims. Furthermore, there must be some adequate suggestion or motivation to combine the teachings of the prior art for rejection under 35 U.S.C. § 103.

In the present case, the prior art of record – alone and in combination – fails to teach or suggest every limitation of the claims as amended. In particular, the prior art in combination fails to teach or suggest (e.g. as illustrated in claim 21) the providing of a stored association of identifiers to assist in re-establishing a data connection that was previously terminated from a communication loss. In the Office Action, it is stated that “the Examiner maintains that the concept of providing the stored association of identifiers

of the application server and the wireless device to assist in re-establishing a connection between the wireless device and the application server was well known in the art as taught by Martin et al.” and further that “[i]n a similar field of endeavor, Martin et al show comparing the identification number of the called station with the stored identification number of the handset and if a match exists, establishing a communication link (col 2, lines 25-40).

The Applicants respectfully disagree with the Examiner’s rejection of claims 21-31 as amended. For one, the Applicants respectfully object to the Examiner’s attempt to use personal knowledge without providing more appropriate evidence when stating that “the Examiner maintains that the concept of providing the stored association of identifiers of the application server and the wireless device to assist in re-establishing a connection between the wireless device and the application server was well known in the art.” No such concepts have been clearly demonstrated. With respect to the cited references, Lehtovirta et al. and Martin et al. in combination fail to even teach or suggest a data connection that was previously terminated based on a communication loss between a wireless device and a wireless network. Even further, Lehtovirta et al. and Martin et al. in combination do not teach or suggest the step of “providing ... a stored association of identifiers of the application server and the wireless device to assist in re-establishing the data connection [that was previously terminated from a communication loss between the wireless device and a wireless network].” Lehtovirta et al. teach identifiers that may be used to release resources of an existing failed connection. On the other hand, Martin et al. teach that a wireless device may compare identification numbers transmitted over-the-air with its own identification number to establish a new communication link for a new call. These are different and unrelated teachings. Finally, there is no teaching or suggestion in the references that an indication that communication is re-established between the wireless device and the wireless network after such communication loss.

Furthermore, there is lack of an adequate suggestion or motivation to combine the teachings of the prior art for proper rejection under 35 U.S.C. § 103. These considerations must take into account any teachings that teach away from the suggested

modifications of the primary reference. In the present case, the primary purpose of Lehtovirta et al. relates to the communication of identifiers *for the release of resources of existing failed connections*. On the other hand, the focus of Martin et al. relates to the matching of identifiers *for the establishment of a new communication link for a call*. Thus, the identifiers described in these two references are utilized for two altogether different purposes, such that no suggestion or motivation exists to associate the two. An attempt to release resources an existing failed connection may be viewed as the opposite of an attempt to establish a new communication link for a new call. These are different and unrelated teachings. As apparent, there is no adequate suggestion or motivation to combine these teachings of Lehtovirta et al. and Martin et al. to produce the techniques of the present invention.

Since Lehtovirta et al. and Martin et al. in combination fails to teach or suggest each and every limitation in claims 21-31 as amended, the rejections under 35 U.S.C. § 102 are overcome. Further, since there is no adequate suggestion or motivation to combine the teachings of these references, the rejections under 35 U.S.C. § 103 are overcome for even additional reasons. Since the rejections are overcome and claims 21-31 as amended are inventive over the prior art, the Applicants respectfully request for the allowance of claims 21-31 as amended.

In the same Office Action of 6 June 2006, the Examiner rejected claims 32-42 of the present application under 35 U.S.C. §§ 102 and 103 based on Smolik (U.S. Patent No. 6,381,455) and Kilgore (U.S. Patent No. 7046646). In response, the Applicants respectfully submit that claims 32-42 as amended are allowable over the prior art for at least the following reasons.

In order for claims to be properly rejected under 35 U.S.C. §§ 102 and 103, the prior art alone or in combination must teach or suggest each and every limitation of the claims. In the present case, the prior art of record – alone and in combination – fails to teach or suggest every limitation of the claims as amended.

In particular, the prior art of record fails to teach or suggest (e.g. as illustrated in claim 31) “after a communication loss between the wireless device and a wireless communication network which causes the data connection to be terminated, receiving a plurality of connection requests from the application server intended for receipt by the wireless device for re-establishing the data connection.” Further, the prior art fails to teach or suggest the step of “limiting a number or a rate of the connection requests received by the wireless device during the communication loss between the wireless device and the wireless network” in combination with the previously recited step.

Smolik describes a technique for reducing an information frame rate when a data transmission produces errors in excess of a threshold, which indicates an impending call drop. The reduction in the information frame rate produces a subtle yet noticeable change in acoustic voice quality, which services as a warning of the impending call drop. As apparent, Smolik relates to reducing frame rates during a call, whereas the present techniques relate to reducing connection requests for re-establishing a data connection that has already been terminated. These are two different techniques altogether. Even further, the information within the frame rate reduction of Smolik does not include a plurality of connection requests for a data connection. The “service requests” indicated by the Examiner do not appear to be part of the frame rate reduction technique of Smolik, but merely indicate whether the option is enabled or not. Even if it did describe this aspect (which it does not), Smolik does not describe a plurality of connection requests for *re-establishing a previously-terminated data connection*.

Since the prior art fails to teach or suggest each and every limitation in claims 32-42 as amended, the rejections under 35 U.S.C. §§ 102 and 103 are overcome. The Applicants respectfully request for the allowance of claims 32-42 as amended.

In the same Office Action of 6 June 2006, the Examiner rejected claims 43-54 of the present application under 35 U.S.C. § 102 based on Smolik (U.S. Patent No. 6,381,455) (claims 43-45 and 47-51) and Tanaka (U.S. Patent No. 5454026) (claims 46

and 52-54). In response, the Applicants respectfully submit that claims 43-54 as amended are allowable over the prior art for at least the following reasons.

In order for claims to be properly rejected under 35 U.S.C. §§ 102, the prior art alone or in combination must teach or suggest each and every limitation of the claims. In the present case, the prior art of record – alone and in combination – fails to teach or suggest every limitation of the claims as amended.

With respect to claims 47-54 first, the prior art of record fails to teach or suggest (e.g. as illustrated in claim 47) the steps of “in response to identifying a new RF signal for communication during the scanning, transmitting a control message to re-establish the communication” but “normally refraining from transmitting the control message until the new RF signal is identified from the scanning.”

In wireless communication networks where the receipt of “pushed” information is a priority, the RF coverage state of the wireless device is an important consideration. Conventional attempts to repeatedly contact the wireless network when the wireless device is out-of-coverage may be made without regard to the wireless traffic burden that is created. This is undesirable. According to the present techniques, however, the wireless device operates to “normally refrain from transmitting control messages” but “in response to identifying a new RF signal for communication,” transmit “a control message to re-establish the communication.”

The prior art of record fails to teach or suggest the same. In Tanaka, the purported transmission of the control message as indicated by the Examiner in the Office Action is an end user attempting to place a call from the wireless device. The end user attempt in Tanaka is clearly different from the step of “in response to identifying a new RF signal for communication during the scanning, transmitting a control message to re-establish the communication” which is caused by one or more processors of a wireless communication device. Even further, Tanaka does not teach the refraining of transmission of control messages until a new RF signal is identified. In Smolik, the particular acts of scanning are not even discussed, and the Examiner has not identified or articulated any such teachings which relate to scanning.

Next, with respect to claims 43-46, the prior art of record (e.g. Smolik) fails to teach or suggest (e.g. as illustrated in claim 43) the steps of “based on detecting that the signal strength of the signals received from the cellular network is below the predetermined threshold, scanning for signals from one or more additional cellular telecommunications networks” and “in response to signals from one or more additional cellular telecommunications networks being inadequate for communication, transmitting on a regular basis a control message which informs the cellular network of the presence of the cellular mobile station.”

In the rejection, the Examiner fails to show or articulate any teaching or suggestion in Smolik regarding the step of “based on detecting that the signal strength of the signals received from the cellular network is below the predetermined threshold, scanning for signals from one or more additional cellular telecommunications networks.” In Smolik, the particular acts of scanning are not even discussed, and the Examiner has not identified or articulated any such teachings which relate to scanning. With respect to the claimed step of “transmitting on a regular basis a control message,” the Examiner indicates that this limitation is met in Smolik when “the base station sends service request to mobile unit.” However, the service request in Smolik is sent by the base station, whereas the claim method is performed “in a cellular mobile station” as recited. Further, there is no teaching or suggestion (or articulated reasoning by the Examiner) that the sending of the service request in Smolik is sent on a regular basis.

Thus, since the prior art fails to teach or suggest each and every limitation in claims 47-54 as amended, the rejections under 35 U.S.C. §§ 102 and 103 are overcome. The Applicants respectfully request for the allowance of claims 47-54 as amended.

Based on the above, the Applicants respectfully submit that all claims as amended are allowable over the prior art of record and the application is in a condition suitable for allowance.

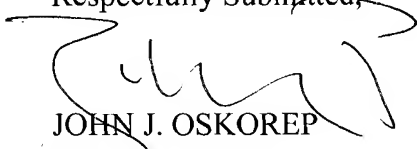
Thank you. Please feel free to contact the undersigned if it would expedite prosecution of the application.

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Respectfully Submitted,



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